Three main mixing methods

- Batch
- In-Line or “mix-in”
- Separate Application or “honeymoon”
Batch Mixing

- Was a very common method in mills in New Zealand and Australia.
- Still used today in smaller mills.
- Can be used with liquid/powder and liquid/liquid systems.
- Used to mix in extenders and fillers.
- Bakers type mixer
  - Blades that rotate in a planetary action
  - Produce a uniform glue-mix.
- High speed, high shear disc mixer.
- Low cost and simple to set up and use.
- Issues with pot-life
- Consistency of batches
- Glue waste
- Environmentally unfriendly.
In - Line Mixing

- Increasingly more common in mills in New Zealand and Australia.
- Used with liquid/liquid systems, can be used with liquid/powder but require the powder to be made into a slurry.
- Fillers and extenders added by Resin suppliers.
- Benefits
  - Less glue waste
  - No pot-life issues
  - Consistent mixing and ratio
  - Environmentally friendly
- High initial capital cost
  - Very quick payback however

In-line mixing equipment
Separate Application

- Not common in mills in New Zealand and Australia.
- Very common in Europe and Scandinavia.
- Used with liquid/liquid systems.
- Fillers and extenders added by Resin suppliers.
- Benefits
  - No pot-life issues
  - Can get very reactive systems
  - Quick cure
  - Washless systems
  - Very environmentally friendly
  - No ambient “odours”
- High capital costs
  - Need duplicate applicator heads in Germany.

Separate application equipment.